

By this Response and Amendment:

Claims 1, 4 and 5 are amended to further differentiate the claimed invention from the prior art; as amended, the rejections of claims 1, 4 and 5 under 35 U.S.C. 103(a) are traversed;

claims 2 and 3 are amended to obviate their objections; and

the rejections of claims 2 and 3 under 35 U.S.C. 103(a) are traversed.

It is respectfully submitted that the above amendments do not introduce any new matter to this application within the meaning of 35 U.S.C. § 132.

In particular, support for the amendments to claims 1, 4 and 5 is found in the originally filed drawings of Figures 1 and 2, and in the originally filed Specification at page 6, lines 8-12 and 23, and at page 11, lines 26-35.

Rejections of claims 1, 4 and 5 under 35 U.S.C. 103(a)

The Examiner rejected claims 1, 4 and 5 under 35 U.S.C. 103(a), as being obvious over the '516 patent to Hasegawa in view of the '527 patent to Aruga et al.

Response

Claims 1, 4 and 5 have been amended to further differentiate the claimed invention from the prior art. As amended, the rejections of claims 1, 4 and 5 are respectfully traversed.

The present invention, as presently claimed in independent claims 1, 4 and 5, is directed to a stencil printing machine and a method of controlling said stencil printing machine.

As claimed in amended claims 1, 4 and 5, the stencil printing machine of the present invention comprises a plurality of printing drums, **a common pressure drum** and a control section. The printing drums are adapted to be selectively one of in press contact and out of contact with the common pressure drum. All printing drums **print on the same print paper.**

The control section controls a stencil printing process in order to increase its efficiency so that even if one of the printing drums not being used in the printing process is in an error state, the printing process is still performed by others of the printing drums.

In contrast, the '516 patent to Hasegawa discloses a stencil printing machine having a plurality of printing

drums each associated to **a corresponding one of a plurality of pressure drums** arranged on an incline (see Figs. 1-3); and the '527 patent to Aruga et al. discloses a hybrid printer device equipped with a plurality of printing mechanisms that performs printing on **mutually different types of recording media** (see col. 2, lines 39-44).

Applicant submits that a combination of the teachings of Hasegawa with the teachings of Agura et al. would not yield a stencil printing machine and control methods thereof as claimed in the present application.

The '516 patent to Hasegawa does not teach a plurality of printing drums adapted to be selectively one of in press contact and out of contact with said common pressure drum.

The '527 patent to Aruga et al. is directed to a hybrid device in which the control section deals with different printing mechanisms printing independently on different types of recording media. This patent does not teach how to control a stencil printing process involving a plurality of printing drums printing on the same paper, in which the printing process can still be carried out when one of the printing drums is in an error state. The '527 patent to Aruga et al. rather teaches how **one printing process is performed** by one mechanism while **another**

printing process is not performed by another mechanism.

The '527 patent to Aruga et al. is therefore directed to a method of controlling separate printing processes performed by separate printing mechanisms on separate and distinct media, while the present invention is directed to an apparatus and a method of controlling a printing process performed by a plurality of printing drums on a same medium.

For example the method disclosed by Aruga et al. is used to control printing processes performed by a thermal printing mechanism printing receipts on a roll of thermal paper, and by a wire dot printing mechanism printing on slip forms such as checks and vouchers (see col. 1, lines 42-46); while the printing machine according to the present invention can be used for example in a mono-color or a multi-color printing process for printing on a same medium.

Furthermore, the Examiner's assertion, in the present Final Office Action, that the Aruga et al. reference was only relied on for the control logic that it discloses and not the structure of the printing machine is an artificial restriction of the teachings of the Aruga et al. patent which is in contradiction with the requirement that "PRIOR ART MUST BE CONSIDERED IN ITS ENTIRETY, INCLUDING

DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS" (MPEP §2141.02).

Thus, Applicant submits that not only would it not have been obvious to one skilled in the art to combine the teachings of Hasegawa with the teachings of Aruga et al.; even if combined the combination would not result in the presently claimed stencil printing machine and methods of controlling thereof. It is therefore asserted that claims 1, 4 and 5 are patentable over the cited references.

Accordingly, reconsideration and withdrawal of the rejections is respectfully requested.

Rejections of claims 2 and 3 under 35 U.S.C. 103(a)

The Examiner rejected claims 2 and 3 under 35 U.S.C. 103(a) as being obvious over the '516 patent to Hasegawa in view of the '527 patent to Aruga et al., and further in view of the '040 patent to Ashikagaya, the '274 patent to Kawai et al. the '920 patent to Hasegawa et al.

Response

The rejections are respectfully traversed. Applicant incorporates by reference the arguments presented hereinabove in response to the rejections of claims 1, 4

and 5. Claims 2 and 3 depend from claim 1 and are asserted to be patentable over the cited prior art for at least the same reasons that claim 1 is patentable thereover.

Accordingly, reconsideration and withdrawal of the rejections is respectfully requested.

Objections to claims 2 and 3

The Examiner objected to claims 2 and 3 because of informalities, as follows:

In claims 2 and 3, the language remains awkward and grammatically incorrect. For example, in claim 2, are there a discharged stencil sheet box and ink container for each printing drum? In claim 3, lines 3-4, the phrase "selects one or more the printing drums" appears to be missing "of" between "more" and "the". On line 5, the phrase "instructs to initiate" is awkward. On line 7, "display sections to inform following error states" is awkward and confusing.

Response

Claims 2 and 3 have been amended to obviate the objections.

In particular, claim 2 has been amended by replacing "the" with --a-- in front of the first occurrence of the expression "discharged stencil sheet box"; and by replacing "the" with --an-- in front the first occurrence of the expression "ink container", thereby curing the lack of

antecedent basis of these two expressions.

However, Applicant submits that the limitations being claimed in claim 2 are not a "discharged stencil sheet box" and an "ink container", but rather the detection sections associated with these elements, i.e. the discharged stencil sheet box **absence detection section**, the discharged stencil sheet box **full detection section**, the ink container **detection section**, and the ink **sensor section**.

Thus, the number of discharged stencil sheet boxes per printing drum and the number of ink containers per printing drum could vary without changing the scope of the claimed invention, and are therefore not needed to particularly point out and distinctly claim the subject matter that the Applicant regards has his invention.

Accordingly, reconsideration and withdrawal of the objection to claim 2 is respectfully requested.

Claim 3 has been amended to obviate the objection. In particular, the phrase "instructs to initiate" has been replaced with the word --initiates-- ; the word "the" between "one or more" and "printing drums" has been deleted; and lines 7-9 of the claim have been rephrased to render them grammatically correct and to suppress any possible awkwardness.

Accordingly, reconsideration and withdrawal of the objection to claim 3 is respectfully requested.

Newly Submitted Claims

Newly Submitted claim 7-8 claim "...an operation panel displaying **error** information".

The cited Ashikagaya et al. patent discloses an operation display panel that displays numbers of printings, kinds of ink, print speed and the like; but does not disclose that the operation panel displays **error** information. Accordingly, newly submitted claims 6-7 are asserted to be patentable over the prior art of record.

CONCLUSION

In light of the foregoing, Applicant submits that the application is now in condition for allowance. If the Examiner believes the application is not in condition for allowance, Applicant respectfully requests that the Examiner contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

Respectfully submitted,

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Attachment A
(Listing of claims)

1. (currently amended): A stencil printing machine comprising:

B¹ a plurality of printing drums ~~adapated~~ adapted to be selectively one of in press contact and out of contact with a common pressure drum, each printing drum being adapted to print on a same print paper; and

a control section controlling a stencil printing process so that even if one of the printing drums ~~that is~~ not being used in the current stencil printing process is in an error state, the stencil printing process is performed by ~~using~~ other printing drums.

2. (currently amended): The stencil printing machine according to claim 1, further comprising:

a printing drum absence detection section comprising a plurality of first detectors, one of said first detectors corresponding to each printing drum for detecting whether or not each of the printing drums is mounted in the stencil printing machine;

a discharged stencil sheet box absence detection section comprising a plurality of second detectors, one of said second detectors corresponding to each printing drum for detecting whether or not ~~the~~ a discharged stencil sheet box is mounted in the corresponding printing drum; and

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(continued)
a discharged stencil sheet box full detection section comprising a plurality of third detectors, one of said third detectors corresponding to each discharged stencil sheet box for detecting whether or not the discharged stencil sheet box is filled with used stencil sheets,

wherein each printing drum further comprises:

an ink container detection section detecting whether or not ~~the~~ an ink container is mounted in the corresponding printing drum; and

an ink sensor section detecting whether or not an ink is filled in the corresponding ink container in the printing drum,

wherein the control section controls the stencil printing process based on detection results of the above detection sections.

3. (currently amended): The stencil printing machine according to claim 1, further comprising an operation panel

displaying error information and through which a user selects one or more ~~the~~ printing drums to be used in the stencil printing process and ~~instructs to~~ initiates the stencil printing process,

wherein the operation panel comprises at least one ~~of~~ the display sections to inform the user of ones of the following error states for each printing drum ~~to the user~~:

no printing drum is mounted;

no ink container is mounted;

ink container is empty;

no discharged stencil sheet box is mounted; and

discharged stencil sheet box is filled with discharged stencil sheets.

4. (currently amended): A control method of a stencil printing machine having a plurality of printing drums ~~adapated~~ adapted to be selectively one of in press contact and out of contact with a common pressure drum, each printing drum being adapted to print on a same print paper, the method comprising:

a control step that even if one of the printing drums ~~that is~~ not being used in ~~the~~ a current stencil printing

process is in an error state, the stencil printing process is performed by using other printing drums.

5. (currently amended): A control method of a stencil printing machine having at least two printing drums ~~adapated~~ adapted to be selectively one of in press contact and out of contact with a common pressure drum, each printing drum being adapted to print on a same print paper by selectively executing one of a mono-color and multi-color printing process, the method comprising:

a control step that even if one of the printing drums ~~that is not being~~ used in ~~the~~ a current stencil printing process in the mono-color printing process is in an error state, the mono-color printing process is performed by using other printing drums.

6. (new) A stencil printing machine comprising:
a plurality of printing drums;
a control section controlling a stencil printing process so that even if one of the printing drums not being used in the current stencil printing process is in an error state, the stencil printing process is performed by other printing drums; and

an operation panel displaying error information and through which a user selects one or more printing drums to be used in the stencil printing process and initiates the stencil printing process.

B!
(concluded)

7. (new) A method of stencil printing using a stencil printing machine including a plurality of printing drums, a control section controlling a stencil printing process so that even if one of the printing drums not being used in the current stencil printing process is in an error state, the stencil printing process is performed by other printing drums, and an operation display panel displaying error information and through which a user selects one or more printing drums to be used in the stencil printing process and initiates the stencil printing process, the method comprising:

judging whether one or more errors exist in relation to the printing drums selected by a user;

displaying error information on the operation panel if an error exists so that the user can rectify the machine to remove the error or choose other printing drums; and

performing the printing process using the selected printing drums if no error exists and a start key on the operation panel is pushed by the user.
